Department of Defense
Individual's Briefing

SMALLPOX

Version: 27 Dec 02

Key Messages

1. **Smallpox would disrupt military missions, because it is contagious and deadly**
2. **Smallpox vaccine prevents smallpox, but requires very careful use**
3. **Preserving the health and safety of our people are our top concerns**
4. **Smallpox protection helps our War on Terrorism: New threats require new measures of force protection**

Threat

1. Smallpox would disrupt military missions, because it is contagious and deadly

- **Smallpox is a contagious disease that spreads from one person to another**
- **Before smallpox was eradicated, it killed many millions of people over hundreds of years**
- **Terrorists or governments hostile to US may have or could obtain variola virus**
- **A smallpox outbreak would significantly affect military readiness**

Vaccine Effectiveness

2. Smallpox vaccine prevents smallpox, but requires very careful use

- **World Health Organization (WHO) used this vaccine to eradicate natural smallpox**
  - **95% of people are protected within 10 days**
  - **Solid protection for 3 to 5 years**
  - **Partial protection lasts longer**
    - **But people need to be revaccinated, if too much time has passed**
  - **Can protect up to 3 days <u>after</u> exposure**
- **Contains live vaccinia virus, cannot cause smallpox**
- **Same vaccine given since World War II**

Smallpox Vaccine

FDA recently licensed a limited supply of smallpox vaccine made by Wyeth Laboratories, called Dryvax® .

- **The vaccine is made from virus called *vaccinia*, which is another “pox”-type virus related to smallpox**
- **The vaccine helps body develop immunity to smallpox. The vaccine does not contain smallpox virus and cannot spread smallpox**
- **This same vaccine given to millions of Americans, including Service Members during World War I, World War II, and until 1980s**
- **Vaccine used for Service Members passes all tests required by Food and Drug Administration (FDA)**
- **Smallpox vaccine was very first vaccine (1796) and has been used successfully for over 200 years**

Expected Effects, Side Effects

- **Expected: A red blister that should turn white 6 to 8 days after vaccination. Then it will turn into a scab.**
  - **This shows successful vaccination.**
  - **If no white blister, may need another vaccination.**

See also:
www.bt.cdc.gov/training/smallpoxvaccine/reactions/normal.html#

ost people experience
ormal, mild reactions, such
s sore arm, fever, headache,
ody ache, or fatigue.

ymptoms usually peak 8 to
2 days after vaccination.

Side Effects—Serious

- In past, about 1,000 out of 1,000,000 people had reactions that were serious, but not life-threatening
  - Most involved vaccine virus elsewhere on body
  - Many preventable through better h*and washing!*
- 14 to 52 people out of 1,000,000 vaccinated for first time had potentially life-threatening reactions
  - 1 or 2 people of 1,000,000 may die as a result
- Serious side effects are generally more rare after revaccination but may require prolonged care
- To reduce risk of side effects, exempt people with immune problems or certain skin conditions

Serious Adverse Events

- **Serious reactions that may require medical attention:**
  - Accidental spread of virus to another body part or another person
  - Widespread vaccine rash where sores break out away from vaccination site (generalized vaccinia)
  - Allergic rash after vaccination (erythema multiforme)
- **Life-threatening reactions that need immediate attention:**
  - Serious skin rashes in people such as those with eczema or atopic dermatitis (eczema vaccinatum)
  - Ongoing infection of skin with tissue destruction (progressive vaccinia or vaccinia necrosum)
  - Postvaccinal encephalitis, inflammation of the brain

Care of Vaccination Site

This woman touched her vaccination site, then touched her eye. She recovered with a scarred eyelid.

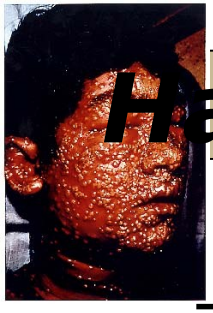
Vaccine virus remains at the site, until scab falls off & can infect others

- Vaccine recipients need to be careful and informed
- Vaccine recipients need to educate close contacts about risk

1. **Don’t touch any vaccination site**
2. **If you touch it by accident, wash your hands right away**
3. **Don’t let others touch vaccination site or materials that covered it**
   - Wear gloves if assisting with site care
4. **Handle your own laundry/towels and place in hot soapy water directly**

Hand Washing & Hand Hygiene

- Wash hands with soap and warm water
  - rub hands together vigorously **for at least 10 seconds**
  - cover all surfaces of the hands and fingers
  - rinse hands with warm water
  - dry hands thoroughly with a **paper towel**
  - use paper towel to **turn off the faucet**
- Alcohol-based waterless hand rinse *e.g.,* CalStat®
  - Excellent alternative if hands are not visibly soiled
  - Apply product to palm and rub hands together, covering all surfaces of hands and fingers, until hands are dry
  - May have sticky feel after repeated use – wash hands with soap and water as needed



Hand Washing & Hand Hygiene

To prevent accidental virus exposure to the genital or rectal area, wash your hands **BEFORE** using the bathroom

After using the toilet, **W**

ds again.

Be extremely careful with your contact lenses!

- Wash hands thoroughly before you touch your eye or the lenses
- Wearing your glasses until site heals is preferred

Care of Vaccination Site

Follow these instructions carefully, or you could harm yourself or others. Ask questions if anything is unclear.

- **Until your scab falls off**, avoid spreading vaccine virus to close contacts, particularly with people exempted from getting vaccinated
- **Do not share a bed, bunk, or cot with people who are exempted from vaccination**
  - Anyone is at risk for vaccine virus contact infection, so **Wash Your Hands**
- Do not share clothes, towels, linen, or toiletries
  - Anyone is at risk for vaccine virus contact infection, so **Wash Your Hands**

Care of Vaccination Site

Follow these instructions carefully, or you could harm yourself or others. Ask questions if anything is unclear.

- **Wear sleeves to cover the site**.
- Use bandages, if needed. Dispose of bandages in sealed or double plastic bags. You may carefully add bleach, alcohol, or soap, if desired
- **Keep site dry**, except normal bathing. Avoid rubbing. Avoid swimming or public bathing facilities
- **Launder** clothing, towels, and sheets in hot water with detergent or bleach.
- When the scab falls off, flush it down the toilet. Soap, alcohol, sunlight, chlorine, and bleach kill the virus.
- **Wash your hands – Hand washing, hand washing!**

Exemptions to Vaccination

Medical exemptions are given for medical conditions that increase the risk of serious adverse events

- Some people should not get smallpox vaccine, <u>except</u> under emergency situations. A Medical Exemption is given IF:
  - Your immune system is not working fully (due to disease, medication, or radiation)
  - You have or had eczema or atopic dermatitis
    - Red, itchy, scaling rash lasting more than 2 weeks, comes & goes
  - You have active skin diseases like:
    - Burns, psoriasis, contact dermatitis, chickenpox, shingles, impetigo, uncontrolled acne, until it clears up or is under control
  - You are pregnant
  - You have a close contact with someone with the risk factors above ↑
  - You are breastfeeding
  - You are allergic to smallpox vaccine or a component such as polymyxin B, streptomycin, tetracycline, neomycin, or latex
  - Women should avoid getting pregnant for 4 weeks after smallpox vaccination

Pregnancy & Infant Care

- **Defer routine smallpox vaccinations until after pregnancy:**
  - **When pregnant women get smallpox vaccine, pregnancy usually goes well**
  - **In rare cases, vaccine virus caused vaccinia infection of the fetus**
- **In an outbreak, personal benefit from vaccination may outweigh risks**
- **Take care to prevent spread of vaccine virus to infants < 1 year of age. Wash hands before handling infant (e.g., feeding, changing diapers)**
- **Smallpox vaccine not recommended for nursing mother, as it could put infant in close contact with mother's vaccination site**

Vaccines

3. Preserving the health and safety of our people is our top concern

- **Vaccines will keep you and your team healthy**
- **Healthy troops complete their missions**
- **Vaccines:**
  - **Shield you from dangerous germs**
  - **Keep units fit to fight**
  - **Help you return home safely**
- **Vaccines saved more lives than any other medical invention, more than antibiotics or surgery. Only clean water has saved more lives**

Adverse Event Reporting

- **Vaccine Adverse Event Reporting System (VAERS)**
  - **FDA and CDC review 100% of adverse-event reports submitted to VAERS**
  - **Anyone can submit a VAERS form**
  - **Reporting with medical help is preferred**
- **DoD requires a VAERS form submission for:**
  - **Loss of duty 24 hours or longer (≥ 1 duty day)**
  - **Hospitalization**
  - **Suspected vaccine vial contamination**
- **Other submissions encouraged**
- **Report to VAERS at www.vaers.org or call 800-822-7967**

Reserve Adverse-Event Care

- **Adverse events after DoD- or USCG-directed vaccinations are line-of-duty conditions**
- **Someone with an adverse event in a non-duty status possibly associated to any vaccination:**
  - **Seek medical evaluation at a DoD, USCG, or civilian medical treatment facility, if necessary**
  - **Must report the event to your unit commander or designated representative as soon as possible**
  - **See local medical department or squadron for guidance**
- **Commander will determine Line of Duty and/or Notice of Eligibility status, if required**

Vaccine Safety

- Carefully read & complete screening form
  - You are helping accurately document that it is safe to give you the vaccine
- Ask questions if you are unsure
- Contact family members who may know about childhood history of recurrent rashes like eczema
- Talk to close contacts and family members about the vaccination program and safety precautions
- Ask for assistance at any point, if needed by you or your close contacts or if you have safety concerns

Information Sources

- **Chain of Command**
- **Website: www.smallpox.army.mil**
- **E-Mail: vaccines@amedd.army.mil**
- **Toll-Free: 877.GET.VACC**
- **CDC National Immunization Hotline: 800.232.2522**
- **CDC Bioterrorism Information: www.bt.cdc.gov**
- **Walter Reed Vaccine Healthcare Center, for help with complicated adverse-event management: 202.782.0411**
  - **Askvhc@amedd.army.mil www.vhcinfo.org**
- **Information for Civilian Healthcare Providers: The Military Treatment Facility (MTF) where the member is enrolled, OR contact The Military Medical Support Office (MMSO) 888-647-6676 if the member is not enrolled to an MTF.**